

CLAIMS

What is claimed is:

1. A plastics processing machine for producing fiber-containing thermoplastics, comprising:
an extruder;
a scale assembly having a weighing plate for determining an amount of fiber to be supplied to the extruder; and
a fiber feeding device for supply of fiber material from a take-off unit to the extruder, said fiber feeding device including a first fiber guide unit, which is securely fixed to the weighing plate, for removing the fibers from the take-off unit, and a second fiber guide unit which is decoupled from the weighing plate and so constructed as to route the fibers between the first and second guide units in a substantially perpendicular relationship to a gravitational force.
2. The plastics processing machine of claim 1, wherein the first fiber guide unit includes at least one deflecting element for deflecting a fiber take-off direction by less than 180°.
3. The plastics processing machine of claim 1, wherein the first fiber guide unit includes at least two deflecting elements for deflecting a fiber take-off direction by about 90° or less.

4. The plastics processing machine of claim 2, wherein the deflecting element is constructed as a rod oriented in substantial perpendicular relationship to the fiber take-off direction.
5. The plastics processing machine of claim 4, wherein the rod is made of ceramics.
6. The plastics processing machine of claim 4, wherein the rod has a surface made of ceramics.
7. The plastics processing machine of claim 2, wherein the deflecting element is constructed as a roller.
8. The plastics processing machine of claim 7, wherein the roller has a rolling surface made of ceramics.
9. The plastics processing machine of claim 1, wherein the take-off unit is a member selected from the group consisting of spool, drum and roving.
10. A scale assembly for a plastics processing machine, comprising a weighing plate; and a fiber guide unit, securely fixed to the weighing plate, for removing fibers from a take-off unit.

11. The scale assembly of claim 10, wherein the take-off unit is a member selected from the group consisting of spool, drum and roving.
12. A fiber feeding device for transporting fiber material from a scale assembly to an extruder, said fiber feeding device comprising:
 - a first fiber guide unit securely fixed to the scale assembly and drawing fibers in a substantially vertical direction in opposition to a gravitational force, and
 - a second fiber guide unit which is decoupled from the scale assembly and constructed such that the fibers travel between the first and second guide units in a substantially perpendicular relationship to the gravitational force.
13. The fiber feeding device of claim 12, wherein the first fiber guide unit includes a frame mounted to the scale assembly, and a deflection assembly mounted to the frame for deflecting a travel of the fiber by less than 180°.